Utility Regulation

Utility Revenue Formula

$$R = O_c + (V - D)r_r$$

Where:

R is the revenue justified

$\mathbf{O_c}$ is the operating cost, including depreciation

V is the value or first cost

D is the accrued depreciation

$\mathbf{r_r}$ is the allowed rate of return

(V- D) is known as the "**ratebase**"

If debt is 50% then $\mathbf{r_r = .5r_d + .5r_e}$

$\mathbf{r_d}$ is return on debt

$\mathbf{r_e}$ is return on equity

Use of Revenue Formula

Investment $100, 5 yr. straight line depreciation or $20/yr, 12% return

Year	Calculation	Answer
1	20+(100-0).12	32.00
2	20+(100-20).12	29.60
3	20+(100-40).12	27.20
4	20+(100-60).12	24.80
5	20+(100-80).12	22.40
		136.00
With 10 yr. depreciation		
1	10+(100).12	22.00
2	10+(90).12	20.80
3	10+(80).12	19.60
4	10+(70).12	18.40
5	10+(60).12	17.20
6	10+(50).12	16.00
7	10+(40).12	14.80
8	10+(30).12	13.60
9	10+(20).12	12.40
10	10+(10).12	11.20
		166.00

Regulatory Jurisdiction

FERC ----- Wholesale Transactions (to utilities)

State Commissions -------- Retail Transactions (to end-use customers)

Definitions

- **Revenue Requirement** =

  (Expenses + (Rate of Return x Rate Base))

- **Rate of Return** =

  Weighted Average Cost of Capital

- **Rate Base** =

  Book Value of All Assets Used and Useful to Ratepayers (Less "Cost Free" Capital)

UTILITY CONTRACTING

Most Favored Customer Provision

Exit Clause

Option to Buy Distribution Facilities

Change in Public Policy Provision

Competition Clause

Market-out Provision

Termination Clause

Updated Force Majeure Conditions

Right of First Referral

Assignment

Utility Negotiation

- Utilities Live By Rules
- Customer Contact People are allies
- All deals must be approved by higher Authority
- No Change / Sudden Change